

RESPONSE AND REQUEST FOR RECONSIDERATION

In response to the Office Actions of July 18, 2006 and August 30, 2006, Applicants hereby request the Examiner to reconsider the claims in view of the present amendments and remarks.

Applicants have amended independent claims 1 and 19 by specifying that the phosphite is defined as an alkyl phosphite rather than a hydrocarbyl phosphite as previously claimed. Support for this amendment is found in the specification on paragraph 18. This amendment serves to focus the claims on those specific phosphites that contain alkyl groups, rather than other, more broadly defined, hydrocarbyl groups.

Independent claims 1 and 19 have further been amended to specify the number of carbon atoms range is 12 to 30. Support for this amendment is found in the specification in paragraph 18.

Dependent claims 2 and 17 have been amended to specify that the phosphite definition is consistent with independent claims 1 and 19. Specifically, claims 2 and 17 specify the phosphite is an alkyl phosphite.

Applicants have added a new independent claim 26. The claim is substantially the same as independent claim 1, except the alkyl phosphite is defined as "an alkyl phosphite, wherein the alkyl group contains 14 to 20 carbon atoms." Support for the phosphite definition specifying the alkyl group contains 14 to 20 carbon atoms is found in paragraph 18 of the specification.

Applicants submit that the amended claims are fully supported by the specification and do not add subject matter. No elements other than the nature and chain length of the alkyl groups have been amended. Moreover, the claims as amended are novel and non-obvious over the cited prior art.

Applicants note with gratitude that the Examiner has withdrawn all objections and rejections, except those described in the office actions dated July 18, 2006 and August 30, 2006.

The Examiner, however, maintained that claims 1, 2, 4, 5, 8-10, 14 and 16-22 still failed to meet the requirements of 35 U.S.C. 103(a) over Sumiejski and Vinci et al. Further the Examiner maintained that claims 6, 7 and 15 still failed to meet the requirements of 35 U.S.C. 103(a) over Sumiejski and Vinci et al. and Tagliamonte.

The Examiner was of the position that the evidence supplied in the declaration by J. Sumiejski on May 1, 2006, was insufficient to establish unexpected or surprising results for the claimed invention. In particular, the data was deemed insufficient to rebut a prima facie case of obviousness since the data was believed to be not commensurate in scope with the claimed invention. Specifically, the Examiner objected, in the August 30 Advisory Action, that the claims with the then-proposed amendments would still be objectionable because there was, at that time, no upper limit on the number of carbon atoms in the alkyl group of (a). In the present claims, the alkyl groups are specified to contain 12 to 30 carbon atoms, or, in new

claim 26, 14 to 20 carbon atoms. It is believed that these amendments will address the remaining concern voiced by the Examiner.

Accordingly, Applicants submit that the experimental data provided in the declaration by Sumiejski is commensurate in scope with the invention as it is presently defined by the claims. In particular, Applicants presented data from an alkyl phosphite with a C14 alkyl group, as it provides a meaningful comparison of the lower limit of the present invention, presently set at C12, with the prior art. A person skilled in the art would expect that a C12-alkyl phosphite and the C14-alkyl phosphite actually tested would have similar performance because both alkyl chains have similar properties. As an example of this similarity, the alcohols which correspond to these and longer alkyl chains are solids at around ambient temperature (about 23 °C). In contrast, alcohols with alkyl chains with 10 or fewer carbon atoms are typically liquids. The pages from the CRC Handbook of Chemistry and Physics, 75th Edition (submitted on 08/09/06 as a part of "Applicant Argument/Remarks...") and believed to be available to the Examiner) illustrate the melting points for decanol (6.9 °C), dodecanol (24 °C) and tetradecanol (31.5 to 39.5 °C). It will also be recognized by the person skilled in the art that the longer chain alkyl groups share the property of increasing oil solubility, which is important for a composition designed for use as a lubricant.

It is therefore believed that properties of alkyl chains of 12 to 30 carbon atoms are sufficiently different from those in the reference, below 12, that the material having a C14 alkyl chain reasonably represents the class of materials with the presently-claimed longer chain alkyl groups. As a consequence, while the declaration compared a C14-alkyl phosphite with the C6-alkyl phosphite of the reference, similar performance advantages would be expected from alkyl groups such as C12, or C14, or C16, C18, C20 or higher alkyl groups (up to 30 carbon atoms). Hence the invention example demonstrated in the declaration is commensurate with the scope of the alkyl phosphite of the invention as defined in claim 1, in terms of the nature and length of the alkyl groups.

The C14 test sample even more clearly supports the patentability of the narrower ranges of carbon atoms set forth in new claim 26, and separate consideration for the subject matter of this claim is respectfully requested.

Accordingly, Applicants request the Examiner to find the experimental data provided to be commensurate with the scope of the independent claims and find all claims allowable.

With regard to the example presented in the declaration, the Examiner had further indicated that only one type of each component (b), (c) and (d) is exemplified. Applicants respectfully submit that further experimental exemplification of these components is not legally required. Components (b), (c), and (d), while required components of the lubricating composition, are only of secondary importance when considering the technical problem of reducing wear and shudder that is solved principally by component (a), i.e., the alkyl phosphite. And in order to determine whether an invention exhibits unexpected advantages over a prior art reference, it is only required to compare the claimed invention with the

closest teaching of the prior art. The proper comparison of the prior art with a lubricating composition of the present invention is one that requires the fewest changes to the lubricating composition. This minimizes the number of variables altered and most clearly demonstrates the advantages of the invention. Applicants have closely reviewed the prior art and selected the closest explicit teaching (i.e., an example) to the present invention.

It is not legally necessary to compare variants of the claimed invention with hypothetical variations of the prior art that are not in fact disclosed. Thus, it is not required to test samples with variations of (b), (c), and (d) against modifications of the prior art in which (b), (c), and (d) are similarly varied. If Applicants were required to compare the present invention against such hypothetical, imagined, or reconstructed prior art compositions, it would not be a valid or useful or legally meaningful comparison. This is in part because multiple variables would be changed, and in part because the comparison would no longer be against the actual prior art. Therefore, Applicants' obligation is to compare the invention only against the closest prior art and not against hypothetical, imagined, or reconstructed prior art. Accordingly, Applicants respectfully request the Examiner to withdraw objections of improper breadth of components (b), (c) and (d).

For the foregoing reasons it is submitted that the present claims are unobvious and in condition for allowance. The foregoing remarks are believed to be a full and complete response to the outstanding office action. Therefore an early and favorable reconsideration is respectfully requested. If the Examiner believes that only minor issues remain to be resolved, a telephone call to the Undersigned is suggested.

The number of claims, after amendment, remains 22, for which no additional fee is due. The number of independent claims is now 3, for which no additional fee is due. Any additional required fees, or any insufficiency or overpayment of fees, should be charged or credited to deposit account 12-2275 (The Lubrizol Corporation)..

Respectfully submitted,

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